

Hypothesis Resolving the Paradox of the Natural Selection of Depression and Bi-Polarism in Recent Human Evolution

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Simon Edwards

Research Acceleration Initiative

Introduction

Unresolved in the realm of evolutionary biology/neurology is the question of why it is that genetically heritable mental disorders such as depression and even Bi-Polar Personality Disorder continue to exist despite the obvious dysfunction brought about by them. So the argument goes, if evolution favors improved function and survival ability, then these disorders should not exist unless they confer a survival benefit. If these disorders confer a benefit, what is the nature of that benefit?

Abstract

The currently prevailing theory on depression is that cloudy days cause people to become depressed because, "Lightning storms are dangerous and 'staying put' during storms helped to keep early man safe." I don't consider it particularly likely that lightning, even for tribal people who lived in the forest, was an important factor in shortening the lifespans of early man. According to my hypothesis, the evolutionary "purpose" or "benefit" of depression may in fact be, in some ways, the opposite of this currently promoted theory.

The two primary factors affecting the ability of early man's genes to be passed on, amongst many smaller factors, were the ability to secure food sources and the ability to secure a mate. During inclement weather, tribal man feared the lightning and feared its return. Depression may, in fact, drive a kind of wanderlust that caused early man to venture out after cloudy periods and forget the fear of the lightning. Periods immediately after lightning storms would have been ideal for hunting since large-sized game animals would have worn themselves out doing a series of sprints with each lightning strike. Furthermore, game animals would likely have been temporarily deafened to a certain degree by the thunder, making it easier to sneak up on them.

Thus, it was important that hunts be conducted by early human tribes promptly after storms moved through.

Whereas a depressed mind will likely seek stimulus (and usually will not find adequate stimulus no matter what it does,) a non-depressed mind will usually be content with the status quo. When it comes to finding mates, a depressed person is actually more likely than a non-depressed person to seek out a wider variety of mates and to at least temporarily lower their personal standards. Thus, if an individual has not already secured a mate or wishes to secure another, depression is actually a facilitator of this search and not a hindrance to it, as is commonly held.

When it comes to mammalian reproductive strategies, they can either be based upon "extra-pair copulation" or "pair bonding." Humans would seem to

employ a combination of both of these strategies, both as a whole and as individuals. The individual humans that switch back and forth between these strategies, I believe, have a 100% overlap with the segment of the population with Bi-Polarism. Some would seem to engage in one strategy or the other nearly 100% of the time, but there are some that would seem to be authentic flip-flopers in this regard.

In order to conform in a society that frowns upon promiscuity, mania may have evolved as a means for those humans whose default strategy for reproduction is one of promiscuity to develop a “love of monotony” on, at least, a temporary basis. In developing the ability to form “temporary” but seemingly authentic pair bonds, manic individuals are able to convince their partners (only during manic episodes) that they are intensely focused only on them. In this way, no deception is detectable since even the manic individual is unaware that any insincerity exists. This neurological behavior, in the promiscuous individual, is dependent entirely upon the manic or hypo-manic state. This, I believe, is why Bi-Polarism and promiscuity are so closely linked. It’s not so much that the Bi-Polarism is causing the promiscuity, it’s that the manic and hypo-manic states are pushing promiscuous individuals into relationships with partners that strongly prefer life-long pair bonds, resulting in more reported causes of problem promiscuity. This opens up mating opportunities for the bipolar individual while causing a societal problem that everyone else must deal with.

When a promiscuous individual with Bi-Polarism returns to a depressed state, they become repelled by the monotony of their relationship with their established partner and will begin to attempt alleviate their depressed state by seeking new and exciting experiences with different partners. Until the depressed state ends, the individual with Bi-Polarism will quickly tire of those “intermediary” partners and no “real” bonding (if you can call it that) will be possible until the next hypo-manic or manic state.

There were other situations in which an intermittent love of monotony could confer a survival benefit upon an early human. After a game animal has been killed, it must be prepared for consumption by the tribe. Using sharpened stone tools and primitive fires, this is a process that was monotonous and time-consuming. Based upon what is known about Native American tribes as they existed at the time of the arrival of Europeans, men would hunt while women were tasked with the cleaning and preparation of animals for consumption. Women with a natural tolerance for performing repetitive tasks would have been selected as wives over those who became bored or distracted easily, as they would have made poor wives.

Early human tribes, in a feature still seen today, would have featured individuals with a wide range of intellectual capacities. Individuals with reduced capacity would have craved variety and would have been more likely to share in common a reproductive strategy with those with depression in any of its forms. Individuals with increased IQ would have craved repetition (as intelligent people often do) and would have strongly preferred life-long pair bonding. This would have meant that without the ability of those with promiscuous tendencies to convince more intelligent mates of their loyalty, promiscuous bloodlines would have eventually fell out of favor since, if they

exclusively mated with low-IQ individuals, their IQ would have essentially entered a descending spiral and this would have ended those bloodlines.

It has been said that some of the most sublime works of art have come from a “disturbed mind.” Artistic creativity and manic depression have often been associated, which makes sense when you consider that an individual may only be capable of artistic feats when in one state or the other. It may also be possible that the varied states enable an individual to be able to look at a single concept from the perspective of what are essentially two different individuals. The ability to see the same thing from multiple perspectives lends itself both to artistic and analytical work, both of which are important for the overall survival of tribes, bloodlines, and nation-states. Societies that lack the ingredient of creativity have historically been doomed to failure. Any society that attempts a mass culling of or the systematic marginalization of the mentally unstable are hampering their own creativity.

Conclusion

In summary, depression and bipolar depression can absolutely fit comfortably into the Darwinian puzzle given these tangible evolutionary benefits. As with so many evolutionary traits and behaviors, they are a double-edged sword that may have played an outsized role in facilitating the advancement of our civilization to a much greater degree than anyone knows.